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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,254	07/09/2001	Michelle Zhao	03226.535001;P6054	8275
7590	09/26/2005		EXAMINER DARROW, JUSTIN T	
Jonathan P Osha OSHA & MAY LLP 1221 McKinney Street Suite 2800 Houston, TX 77010			ART UNIT 2132	PAPER NUMBER

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,254

Applicant(s)

ZHAO, MICHELLE

Examiner

Justin T. Darrow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

1. Claims 1-20 have been examined.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 17-20 are drawn to a data structure, stored on a computer readable medium or transported over an electronic communication medium, for a digital certificate revocation list (CRL). A digital certificate revocation list is descriptive material that is not claimed to exhibit any functional interrelationship in the way in which computing processes are performed. Such descriptive material does not constitute a statutory process, machine, manufacture, or composition of matter. See MPEP § 2106 IV. B. 1(b) and *In re Warmerdam*, 33 F.3d 1354; 31 USPQ2d 1754 (Fed. Cir. 1994).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

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subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 4, and 6-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Perlman et al., U.S. Patent No. 5,687,235 A.

As per claims 1 and 6, Perlman et al. illustrates a method and an electronic storage medium storing instructions comprising:

creating a list of digital certificates satisfying at least one inactive criterion (see column 8, lines 56-58; figure 2, item 210; figure 3A, processing block 316; a revocation service (RS) generates an optimal certificate revocation list (CRL); see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data);

identifying a latest CRL in which changes have been made to the list (see column 8, lines 56-64; determining that the CRL is the current version); and

storing an identity of the latest CRL in which changes have been made as a part of the CRL (see column 8, lines 61-64; timestamping the CRL to indicate the latest certificate revocation date of certificates included in the CRL).

As per claim 4, Perlman et al. further suggests:

that the creating, identifying, and storing are carried out at regular time intervals (see column 6, lines 19-21; where the current CRL is valid for a predetermined period of time, a CRL validity period; see column 8, lines 17-21; upon the expiration of which, the certificate authority CA will update the CRL).

As per claim 7, Perlman et al. moreover embodies:

that the at least one inactive criterion comprises an expired status criterion or a revoked status criterion (see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data).

As per claim 8, Perlman et al. also shows:

transmitting the CRL to a recipient over an electronic communication medium (see column 7, lines 65-67; figure 1, items 210, 106, and 104; figure 3A; processing blocks 316 and 318; the revocation service RS sends a complete current CRL to the server through a communication network).

As per claims 9 and 16, Perlman et al. depicts a method and electronic storage medium storing instructions comprising:

storing a first CRL, the first CRL comprising at least a list of digital certificates satisfying at least one inactive criterion and a first CRL identifier (see column 7, lines 36-38; a CRL that a server node presently retains; see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data; see column 8, lines 61-64; timestamping the CRL to indicate the latest certificate revocation date of certificates included in the CRL);

carrying out a processing operation on the first CRL (see column 7, lines 19-21; determining that the CRL is not sufficiently current);

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receiving a second CRL, the second CRL comprising at least a list of digital certificates satisfying the at least one inactive criterion,

a second CRL identifier (see column 8, lines 61-64; timestamping the CRL to indicate the latest certificate revocation date of certificates included in the CRL); and

an identity of a latest CRL having differences with the list of certificates satisfying the at least one inactive criterion (see column 6, lines 19-21; where the current CRL is valid for a predetermined period of time, a CRL validity period); and

carrying out the processing operation the second CRL only if the identity of the latest CRL having differences with the list of certificates satisfying the at least one inactive criterion is more recent than the first CRL (see column 9, lines 26-32; the server node continually storing the incremental CRLs in accordance to the timestamp being more recent than the timestamp on the first CRL).

As per claim 10, Perlman et al. further points out:

storing the list of digital certificates satisfying the inactive criterion (see column 7, lines 36-37; the server node presently retains the CRL).

As per claim 11, Perlman et al. then suggests:

storing the list of digital certificates satisfying the inactive criterion in a database (see column 5, lines 2-23; database comprising data structures for use with cryptographic processes).

As per claim 12, Perlman et al. also elaborates:

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filtering the list of digital certificates based on inactive criteria (see column 7, lines 5-18; figure 3A, block 306; figure 3B, block 326; first checking if the certificate has expired, if not, then checking to see if the certificate has been revoked).

As per claim 13, Perlman et al. also discusses:

authenticating a digital certificate against the second CRL (see column 9, lines 33-37; determining the validity of the certificate with the incremental updated CRL).

As per claim 14, Perlman et al. moreover embodies:

that the at least one inactive criterion comprises an expired status criterion or a revoked status criterion (see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data).

As per claim 15, Perlman et al. also shows:

that the first and second CRL are received over an electronic communication medium (see column 7, lines 65-67; figure 1, items 210, 106, and 104; figure 3A; processing blocks 316 and 318; the revocation service RS sends a complete current CRL to the server through a communication network; see column 7, lines 36-38; as it had previously sent the CRL that server presently retained).

As per claim 17, Perlman et al. delineates a data structure, stored on a computer readable storage medium or transported over an electronic communication medium, comprising:

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a list of digital certificates satisfying at least one inactive criterion (see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data);

a CRL identifier (see column 8, lines 61-64; a timestamp on the CRL to indicate the latest certificate revocation date of certificates included in the CRL); and

an identity of the latest CRL having differences with the list of digital certificates satisfying the inactive criterion (see column 6, lines 19-21; where the current CRL is valid for a predetermined period of time, a CRL validity period).

As per claim 18, Perlman et al. further suggests:

that the CRL identifier is a sequentially assigned number (see column 8, lines 61-64; a timestamp on the CRL to indicate the latest certificate revocation date of certificates included in the CRL is sequentially greater than the timestamp that would be on a previous CRL).

As per claim 19, Perlman et al. moreover embodies:

that the at least one inactive criterion comprises an expired status criterion or a revoked status criterion (see column 7, lines 4-18; the CRL contains for each certificate revocation and expiration data).

6. Claims 1, 3, and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Curry et al., U.S. Patent No. 6,128,740 A.

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As per claims 1 and 6, Curry et al. discloses a method and an electronic storage medium storing instructions comprising:

creating a list of digital certificates satisfying at least one inactive criterion (see column 7, lines 26-28; publishing a new certificate revocation list (CRL));

identifying a latest CRL in which changes have been made to the list (see column 7, lines 26-28; when a new certificate is revoked); and

storing an identity of the latest CRL in which changes have been made as a part of the CRL (see column 7, lines 14-16; figure 4B, block 122; including a validity period in the certificate).

As per claim 3, Curry et al. also discusses:

comparing the list with entries in a previously generated CRL (see column 7, lines 32-35; publishing only delta-CRL or segments which have been updated since the last on-demand or regular publication period).

As per claim 5, Curry et al. then points out:

applying a digital signature to the CRL (see column 6, lines 44-46; a certification authority signature is on the CRL).

As per claim 7, Curry et al. moreover embodies:

that the at least one inactive criterion comprises an expired status criterion or a revoked status criterion (see column 3, lines 1-6; the CRL contains for each certificate revocation and expiration data).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Perlman et al., U.S. Patent No. 5,687,235 A or Curry et al., U.S. Patent No. 6,128,740 A as applied to claim 1 above, and further in view of Nazif et al., U.S. Patent No. 5,481,601 A.

Perlman et al. and Curry et al. each discloses the method of claim 1. However, these references do not individually explicitly teach formatting as an ASN.1 list. Nazif et al. describes ASN.1 syntax used for a list (see column 5, lines 8-12). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to combine the method of Perlman et al. or Curry et al. with ASN.1 format of Nazif et al. to use the list independent of machine architecture (see column 5, lines 27-34).

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman et al., U.S. Patent No. 5,687,235 A as applied to claim 17 above, and further in view of Nazif et al., U.S. Patent No. 5,481,601 A.

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Perlman et al. discloses the data structure of claim 17. However, this reference does not individually explicitly teach formatting as an ASN.1 list. Nazif et al. describes ASN.1 syntax used for a list (see column 5, lines 8-12). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to combine the data structure of Perlman et al. with ASN.1 format of Nazif et al. to use the list independent of machine architecture (see column 5, lines 27-34).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin T. Darrow whose telephone number is (571) 272-3801, and whose electronic mail address is justin.darrow@uspto.gov. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón, Jr., can be reached at (571) 272-3799.

The fax number for Formal or Official faxes to Technology Center 2100 is 571-273-8300. In order for a formal paper transmitted by fax to be entered into the application file, the paper and/or fax cover sheet must be signed by a representative for the applicant. Faxed formal papers for application file entry, such as amendments adding claims, extensions of time, and statutory disclaimers for which fees must be charged before entry, must be transmitted with an authorization to charge a deposit account to cover such fees. It is also recommended that the cover sheet for the fax of a formal paper have printed "**OFFICIAL FAX**". Formal papers transmitted by fax usually require three business days for entry into the application file and

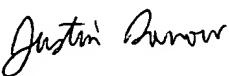
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consideration by the examiner. Formal or Official faxes including amendments after final rejection (37 CFR 1.116) should be submitted to 571-273-8300 for expedited entry into the application file. It is further recommended that the cover sheet for the fax containing an amendment after final rejection have printed not only **"OFFICIAL FAX"** but also **"AMENDMENT AFTER FINAL"**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

September 20, 2005


JUSTIN T. DARROW
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100